We claim:

1. An automatic shifting-operation control system comprising:

an intake air amount detecting means configured to detect an intake air amount of an engine;

an engine control means configured to control operation of the engine by a signal indicating detected intake air amount, and to include one or both of a vehicle speed limiting function for reducing a fuel injection amount to suppress a driving speed of a vehicle to a speed equal to or less than a predetermined limited value and a cruise control function for setting the driving speed of the vehicle to an optional constant speed capable of allowing automatic cruise of the vehicle; and

a transmission control means configured to control a transmission in accordance with a driving state of the vehicle,

wherein the automatic shifting-operation control system further comprises a means for determining whether or not the vehicle speed is being limited by the vehicle speed limiting function, and

wherein the automatic shifting-operation control system controls the transmission such that when it is determined that the vehicle speed is being limited, reference is made to a detected intake air amount is interrupted while interrupting reference to a shifting map on the basis of the detected intake air amount and an engine rotating number, and reference is instead made to a pseudo intake air amount calculated from a fuel injection amount controlled to suppress the driving speed of the vehicle to a speed equal to or less than a predetermined limited value and the engine rotating number and to a specified shifting map based on the calculated pseudo intake air amount and the engine rotating number.

2. The automatic shifting-operation control system according to claim 1, wherein said intake air amount detecting means detects an accelerator opening amount of the engine.

3. The automatic shifting-operation control system according to claim 1, wherein the intake air amount detecting means detects an intake pressure of an air-intake system of the engine.

4. An automatic shifting-operation control system comprising:

an intake air amount detecting means configured to detect an intake air amount of an engine;

an engine control means configured to control an operation of the engine by a signal indicating a detected intake air amount, and to include one or both of a vehicle speed limiting function for reducing a fuel injection amount to suppress a driving speed of a vehicle to a speed equal to or less than a predetermined limited value, and a cruise control function for setting the driving speed of the vehicle to an optional constant speed capable of allowing an automatic cruise of the vehicle; and

a transmission control means configured to control a transmission in accordance with a driving state of the vehicle,

wherein the automatic shifting-operation control system further comprises a means for determining whether or not the cruise control is being in operation due to the cruise control function, and

wherein the automatic shifting-operation control system controls the transmission such that when it is determined that the cruise control is being in operation, reference to a detected intake air amount is interrupted while interrupting reference to a shifting map on the basis of the detected intake air amount and the engine rotating number, and reference is instead made to a pseudo intake air amount calculated from a fuel injection amount for maintaining the optional constant speed during the cruise control and the engine rotating number, and to a specified shifting map on the basis of the pseudo intake air amount and the engine rotating number.

5. The automatic shifting-operation control system according to claim 4, wherein said intake air amount detecting means detects an accelerator opening amount of the engine.

6. The automatic shifting-operation control system according to claim 4, wherein the intake air amount detecting means detects an intake pressure of an air-intake system of the engine.

7. An automatic shifting-operation control system comprising:

an intake air amount detecting means configured to detect an intake air amount of an engine;

an engine control means configured to control an operation of the engine by a signal indicating a detected intake air amount, and to include one or both of a vehicle speed limiting function for reducing a fuel injection amount to suppress a driving speed of a vehicle to a speed equal to or less than a predetermined limited value, and a cruise control function for setting the driving speed of the vehicle to an optional constant speed capable of allowing an automatic cruise of the vehicle; and

a transmission control means configured to control a transmission in accordance with a driving state of the vehicle,

wherein the automatic shifting-operation control system further comprises a means for determining whether or not the vehicle speed is being limited by the vehicle speed limiting function,

wherein the automatic shifting-operation control system control the transmission such that when it is determined that the vehicle speed is being limited, reference to a detected intake air amount is interrupted while interrupting reference to a shifting map based on the detected intake air amount and the engine rotating number, and reference

is instead made to a pseudo intake air amount calculated from a fuel injection amount controlled to suppress a driving speed of the vehicle to a speed equal to or less than a predetermined limited value and the engine rotating number, and to a specified shifting map on the basis of the pseudo intake air amount and the engine rotating number,

wherein the automatic shifting-operation control system still further comprises a means for determining whether or not the cruise control is being in operation by the cruise control function, and

wherein the automatic shifting-operation control system controls the transmission such that when it is determined that the cruise control is being in operation, reference to the detected intake air amount is interrupted while interrupting reference to a shifting map on the basis of the detected intake air amount and the engine rotating number, and reference is instead made to a pseudo intake air amount calculated from a fuel injection amount for maintaining the optional constant speed during the cruise control and the engine rotating number, and to a specified shifting map on the basis of the calculated pseudo intake air amount and the engine rotating number.

8. The automatic shifting-operation control system according to claim 7, wherein said intake air amount detecting means detects an accelerator opening amount of the engine.

9. The automatic shifting-operation control system according to claim 7, wherein the intake air amount detecting means detects an intake pressure of an air-intake system of the engine.